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EXAMINER

NGUYEN, DUC M

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

1. Applicant's arguments filed 4/8/08 have been fully considered but they are not persuasive.

In the response, Applicant contends that

On page 2, the Official Action rejects claims 1-2 under 35 U.S.C. 103(a) as being unpatentable by Todd (US 6,002,672). On page 3, the Official Action rejects claims 1-2 under 35 U.S.C. 103(a) as being unpatentable by Goro (JP Publication 09-148973) in view of Todd. It is respectfully submitted, however, that the claims are patentable over the art of record for the reasons set forth below.

Todd teaches a diversity antenna system wherein a switch is controlled to select an antenna based on the detected electric field strength and bit error rate. Goro is related to a diversity receiver wherein the average of the received electric field strength is utilized to select an antenna.

Applicants' invention as recited by claim 1, includes a feature which is neither disclosed nor suggested by the art of record, namely:

... operation starting point controlling circuit that varies an operation starting point of a variable gain circuit in response to the detected electric field strength and the measured errors...

Claim 1 relates to a receiver with a variable gain circuit. Specifically, the operation start point of the variable gain circuit is controlled in **response to** both the detected field strength from an antenna and a measured errors in the received data packets. This feature is found in the originally filed Application on page 14, line 15 to page 15, line 23 and furthermore in Fig. 4. No new matter has been added.

In column 4, lines 3-34, Todd teaches switching between two antennas in response to received signal strength and bit error rate ("RSSI and BER measurements in order to determine how to toggle RF switch 35 in order to select which antenna is to be used for reception"). Column 5, lines 53-57 of Todd goes on to teach an automatic gain control (AGC) which is adjusted based on the received signal strength ("RSSI_a value is sent to the DSP to adjust internal DSP automatic gain control (AGC) in order to avoid bit hits which result when the maximum input level of the baseband demodulator is exceeded"). Adjusting the automatic gain control based on the received signal strength is a conventional technique used in conventional receivers. This conventional technique insures that the signal remains within a predetermined amplitude range as recited in lines 56 and 57 of Todd ("in order to avoid bit hits which result when the maximum input level of the baseband demodulator is exceeded"). Therefore, it would not be obvious to change the operation start point of the automatic gain control in response to the detected electric field **strength and the measured** errors as suggested by the Examiner on page 2 of the Official Action. AGC as taught by Todd is only adjusted with respect to the received signal strength (not the measured errors).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **adjust the AGC gain** based on both field strength RSSI and measured error BER) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Here, the claim merely recite "... operation starting point controlling circuit that **varies an operation starting point** of a variable gain circuit in response to the detected electric field strength and the measured errors..."

Therefore, the claim **does not** recite the limitation of adjusting the gain of the AGC based on the BER error. Since Todd teaches that an antenna is selected based on RSSI and BER, and since the switching to a new antenna would obviously change the RSSI value to be used for AGC, this would lead to changing the operation start point of the AGC. Therefore, due to the correlation **in time** between antenna switching and the operation start point, it is clear that Todd would teach vary the operation start point of the AGC **in response** to the RSSI and BER as claimed when switching the antenna based on RSSI and BER and then adjusting the AGC gain.

As to Applicant's arguments regarding the Goro and Todd references, the same argument as set forth above would apply equally well.

For foregoing reasons, the examiner believes that the pending claims are not allowable over the cited prior art.

2. **Any response to this action should be mailed to:**

Box A.F.

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or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Nay Muang (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

Apr 24, 2008